Metropolis® Multi-Wavelength Optical Amplifier (OA)

The Lucent Technologies Metropolis® Multi-Wavelength Optical Amplifier (OA) is a versatile, compact, and flexible system that helps overcome the distance limitations of DWDM technology. This cost-effective unit is part of the Metropolis® Wavelength Extension Solution portfolio, and is fully interoperable with Lucent products without the need for additional, costly components. It offers an energy efficient, self-configuring design, and simplfied rack mounting with both front and rear access for easy access.

Features

- Variable Optical Attenuation
- Plug-and-play design
- SNMP and TL1 management
- Gain-flattening and transient control
- Stand-alone transponders
- One-, two-, or four-channel OADM units

Benefits

- Bridges long distance networks through wavelength extension
- Saves floor space with compact design
- Provides low-maintenance performance and management
- Offers operational flexibility
- Delivers stability and efficiency

Applications

- Metro, backbone, and access – single and multiple wavelength span extension
- Mid-span access

Extends multiple wavelengths up to 140km

The Metropolis® Multi-Wavelength OA helps bridge long distances in your network. It can extend single or multiple wavelengths up to 140km in a single span or over multiple spans of up to 100km each.

Offers compact size and flexibility

The minimal power consumption and compact size of the Metropolis® Multi-Wavelength OA helps keep operating costs low. It is available in two standard width sizes: 19x12x2 inch and 23x12x2 inch. This product can be used as a line amplifier, transmit amplifier or pre-amplifier, and it can be configured for mid-span applications.

Provides low-maintenance performance and management

Long-term network operation and management are facilitated by managing Simple Network Management Protocol (SNMP), TL-1, and/or alarm relays with industry-standard methods. Overall operating efficiency can be improved through its optical management capabilities, such as variable optical attenuation.

Delivers cost savings and efficiency

The Metropolis® Multi-Wavelength OA is designed to provide a simple, scalable and cost-effective wavelength extension solution for your network. Installation is facilitated since there is no need for shelves or circuit packs. Plus, when combined with the Metropolis® Passive WDM System, it presents a cost-effective way to extend wavelengths greater distances.

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Technical Specifications

Description	Specifications
1. Optical Parameters	
Wavelength Range	1530 nm to 1563 nm
Input Power Range	–27 to +4 dBm
Output Signal Power	+17 dBm
Signal Gain	Variable 13 – 22 dB
Signal Spontaneous Noise Figure	< 7.0 dB
Polarization Mode Dispersion	0.5 ps @ –20 dBm input
Isolation	Isolator at input and output ports
2. Electrical Parameters	
Communications Interface	IEEE 802.3 10/100 MHz port front panel
	EIA RS-232 port front panel
Power Consumption (at 50°C EOL)	Maximum 25 Watts; 6 Watts typical
Supply Voltage	–48 VDC A and B feeds
	Minimum -40 VDC
	Maximum -60 VDC
Current	Maximum 0.52 A at –48 VDC
3. Environmental Parameters	
Storage Temperature	-40° to 70° C
Ambient Operating Temperature	0° to 50° C
Humidity Operation	5 to 95%RH, non-condensing
4. Physical Attributes	
Dimensions (H x W x D)	1.9 x 17.19 x 11.1 inches
Unit Weight	<10.0 lbs
Optical Connectors	SC-UPC
5. Management	
SNMP	Version 1 and Version 2c
FTP	RFC 959
TL1	Telcordia GR-833CORE and related requirements including NSIF-033-1999
6. Laser Safety	
Class IM Product	Viewing the laser output with optical instruments can pose an eye hazard.
7. Product Certifications	
	UL® Certified
	CE
	NEBS™ level 3

To learn more about our comprehensive portfolio of Optical Networking products, please contact your Lucent Technologies Sales Representative or visit our web site at http://www.lucent.com.

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